

Product datasheet

Recombinant human CD116 protein (Fc Chimera)
ab83993

2 Images

Description

Product name Recombinant human CD116 protein (Fc Chimera)
Biological activity ab83993 bound to protein A sepharose beads was able to pull down its ligand, GM-CSF.
Purity > 95 % SDS-PAGE.

Expression system HEK 293 cells
Accession [P15509](#)
Protein length Full length protein
Animal free No
Nature Recombinant
Species Human

Sequence

Theoretical Sequence:
 EKSDLRTVAPASSLNVRFDSTRMNLWDCQENTTFSKCF
 LTKKNRVV
 EPRLSNNECCTFREICLHEGVTFEVHVNTSQRGFQQKLL
 YPNSGREG
 TAAQNFSCFIYNADLMNCTWARGPTAPRDVQYFLYIRNSK
 RRREIRCP
 YIQDSGTHVGCHLDNLSGLTSRNYFLVNGTSREIGIQFFD
 SLLDTKK
 IERFNPPSNVTVRCNTHCLVRWKQPRTYQKLSYLDFQYQ
 LDVHRKNT
 QPGTENLLINVSGDLENRYNFPSSSEPRAKHSVKIRAADVRI
 LNWSSWS
 EAIEFGSDDGGSSNTKVDKKVEPKSCDKTHTCPPCPAPE
 LLGGPSVFL
 FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG
 VEVHNAKTK
 PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP
 APIEKTISK
 AKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA
 VEWESNGQ
 PENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFC

Additional sequence information Fusion of aa 1-320 of human GM-CSF Receptor alpha and aa 90-330 of Fc region of human IgG1 (P01857). The chimeric protein was expressed in modified human 293 cells.

Specifications

Our [Abpromise guarantee](#) covers the use of **ab83993** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Lyophilized
Additional notes	ab83993 bound to protein A sepharose beads was able to pull down its ligand, GM-CSF. This product was previously labelled as GM-CSF Receptor alpha

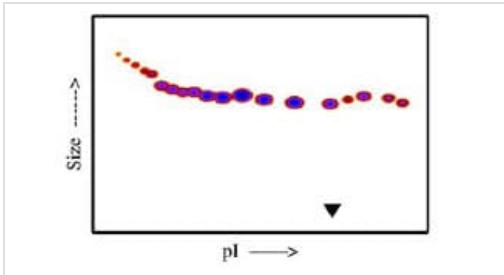
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C. Constituents: 1% Human serum albumin, 10% Trehalose This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial. Following reconstitution short-term storage at 4°C is recommended, and longer-term storage of aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.

General Info

Function	Low affinity receptor for granulocyte-macrophage colony-stimulating factor. Transduces a signal that results in the proliferation, differentiation, and functional activation of hematopoietic cells.
Involvement in disease	Defects in CSF2RA are the cause of pulmonary surfactant metabolism dysfunction type 4 (SMDP4) [MIM:300770]. A rare lung disorder due to impaired surfactant homeostasis. It is characterized by alveolar filling with floccular material that stains positive using the periodic acid-Schiff method and is derived from surfactant phospholipids and protein components. Excessive lipoproteins accumulation in the alveoli results in severe respiratory distress.
Sequence similarities	Belongs to the type I cytokine receptor family. Type 5 subfamily.
Domain	The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding. The box 1 motif is required for JAK interaction and/or activation.
Cellular localization	Secreted and Cell membrane.

Images

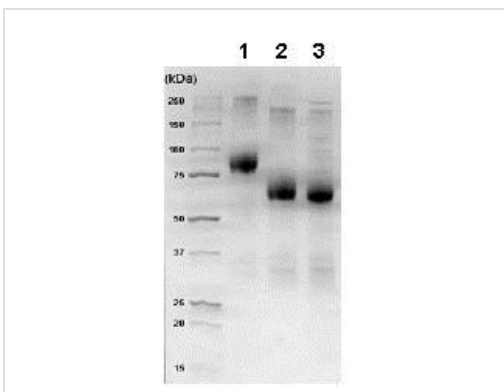


Functional Studies - Recombinant human CD116 protein (Fc Chimera) (ab83993)

Densitometry of protein isoforms visualised by 2-DE.

The densitometry scan demonstrates the purified human cell expressed protein exists in multiple isoforms, which differ according to their level of post-translational modification.

The triangle indicates the theoretical MW and pI of the protein.



SDS-PAGE - Recombinant human CD116 protein (Fc Chimera) (ab83993)

1D SDS-PAGE of ab83993 before and after treatment with glycosidases to remove oligosaccharides.

Lane 1: ab83993

Lane 2: ab83993 treated with PNGase F to remove potential N-linked glycans

Lane 3: ab83993 treated with a glycosidase cocktail to remove potential N- and O-linked glycans.

Approximately 5 µg of protein was loaded per lane; Gel was stained using Deep Purple™.

Drop in MW after treatment with PNGase F indicates presence of N-linked glycans. A tightening of the band after treatment with the glycosidase cocktail indicates O-linked glycans may be present. Additional bands in lane 2 and lane 3 are glycosidase enzymes.

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